

BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: June 17, 2020

LOCATION OF CONFERENCE: John O. Morton Building

ATTENDED BY:

NHDOT

Sarah Large
Andrew O'Sullivan
Matt Urban
Ron Crickard
Mark Hemmerlein
Tim Boodey
Arin Mills
Rebecca Martin
Jennifer Reczek
Margarete Baldwin
Jason Abdulla

ACOE

Rick Kristoff

EPA

Beth Alafat

**Federal Highway
Administration**

Jaimie Sikora

NHDES

Lori Sommer
Karl Benedict

NHB

Amy Lamb

NH Fish & Game

Carol Henderson

The Nature Conservancy

Pete Steckler

LCHIP

Paula Bellemore
Dijit Taylor

**Consultants/Public
Participants**

Christine Perron

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH: *(minutes on subsequent pages)*

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(When viewing these minutes online, click on a project to zoom to the minutes for that project.)

NOTES ON CONFERENCE:**Meeting Minutes**

Finalized and approved the April 15, 2020 and May 20, 2020 meeting minutes.

Wilton, #43076

Arin Mills, NHDOT Environmental Manager, presented the location of the project as bridge 094/162 which carries NH 31 over Stony Brook in Wilton. This is a state funded and state executed project. Stony Brook flows approximately 7 miles from the headwater in Lyndeborough to the site. From the site it further flows approximately 3 miles to the convergence with the Souhegan River in Wilton. The surrounding landscape was described as rural/residential, with no conservation lands identified adjacent to the site. Photos were displayed of the both the existing conditions of the inlet/outlet and upstream/downstream.

Tim Boodey, NHDOT Bridge Maintenance Engineer, described the project to include maintenance in an effort to remove the bridge from the State 'Redlist'. No substructure work or replacement, work will include deck and guardrail replacement. Stack rip rap in SE wing as well and address scour under the toewall, there will not be an increase in the footprint of the structure. Anticipated wetlands impacts were depicted, where a majority is temporary impacts for access. Deck replacement will not require staging in the river, as staging can be set on the existing toewalls. Permanent impacts will include the restacking of rip rap in the SE corner as well as regrading for installation of guardrail. The construction sequence was described that substructure work will be completed first, after installation of dewatering basins. Deck replacement will be done in two phases, with an estimated 5 months to complete the project.

Tim provided details of the preliminary hydraulic analysis, while a full analysis will be provided with the application. The proposed work will not change the hydraulic opening of the structure, and preliminary evaluations indicate the structure will handle a 100-year storm event. Discussions with maintenance personnel indicate the roadway flooded in 2007, but similar events were not recorded in the past 25 years. Arin provided details of the resources present in the project area. Stony Brook is a 2nd order stream, no SWQPA jurisdiction. The location is a Tier 3 crossing, no Designated River or previous permits identified. Stony Brook is a predicted warmwater stream by the Wildlife Action Plan. Natural Heritage Bureau (NHB20-1132) has no records of listed species, and no priority resources in or adjacent to the project. Project is within the 100-year floodplain. US Fish & Wildlife species list found potential for Northern long eared bat, and a 4(d) consistency letter was generated. No archeological or historic properties within project area.

Karl Benedict, NHDES, asked for clarification if the rip rap in the bed of the river, Tim clarified the intent is to re-stabilize the existing rip rap within the water and along bank. Karl also asked on the impacts to the hydraulic capacity. Tim stated no added footprint, and material will be placed to re-establish to address scour between the bottom of the toewall and ledge beneath the structure with no work in the channel. Karl further asked for clarification on dewatering timing and area requiring dewatering. Tim clarified that dewatering will only be required in area of work, and not entire stream. Andy O'Sullivan asked for clarification on Env-Wt 514 rules as it relates to rip rap and how it will be addressed in application. Karl asked the application to describe the existing rip rap, and any additional footprint the project may have from the existing conditions.

Lori Summers, NHDES, anticipated the project will not require mitigation as described as all work in repair to existing infrastructure. If additional rip rap is outside the existing footprint then mitigation can be evaluated, if required.

Amy Lamb, NHB, had no comments. Rick Kristoff, ACOE, had no comments. Beth Alset, EPA, had no comments. Pete Steckler, TNC, mentioned the reach of the stream is Tier 1 in the 2020 Wildlife Action Plan. Pete also mentioned there is documentation of wildlife, such as bobcat, using small abutment ledges for under-road passage such as the one present under the existing bridge. He recommended rip rap placement in a manner that facilitates wildlife to more easily pass under the structure, rather than passing over the roadway.

Sarah Large asked Karl for clarification on the repair work to existing Tier 3, and an Alternative design is not needed under the Env-900 rules. Karl said that as the project, as presented, does not appear an alternative design will be needed unless the hydraulic capacity is significantly changed based on the analysis. Karl recommends the application summarize changes to hydraulic capacity, and Sarah and Karl can discuss if additional form will be required once the application is drafted. Sarah also asked for clarification on field data collection required for this repair project. Karl stated as the project is repair/improvement (vs replacement) that additional data collection will not be needed, such as geomorphic reference reach.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Dummer-Cambridge-Errol, #16304B (X-A004(699))

Christine Perron introduced the project, which is the next segment of the NH Route 16 corridor project. The first contract along this corridor, 16304A, was designed and permitted and is now under construction. The 16304B project is a 1.3-mile segment a few miles north of 16304A, starting at approximately the Dummer/Cambridge town line. The entire project is located entirely in Cambridge, an unincorporated place in Coos County.

The project was discussed at this meeting in June 2019. Since that time, there has been additional coordination with LCHIP and the Forest Legacy Program regarding impacts to 13 Mile Woods, as well as the NHDES Wetlands Bureau regarding the two stream crossings in the project area. A public meeting was held at the Coos County Commissioners Meeting. Based on coordination and analysis to date, the Department has selected a preferred alternative. The purpose of today's meeting is to review the alternatives analysis and begin discussing mitigation considerations.

The purpose of the project is to address the poor condition of the pavement and road base and provide a sustainable roadway that maintains the connectivity of the corridor, minimizes long-term maintenance and risk resulting from the proximity of the Androscoggin River, and preserves the scenic quality of the surrounding area. There are a number of constraints that have required consideration throughout the alternatives analysis:

- At least one lane of traffic must be maintained during construction. There are no reasonable detours that could be in place for an entire construction season.
- Wetlands, the river, floodplain, and conservation land are located throughout the entire project area and impacts to all resources need to be considered and balanced with the project's purpose.
- Due to the presence of these resources, potential areas for stormwater treatment are limited.
- Finally, the project must be sensitive to aesthetics in order to meet the purpose of the scenic easement and 13 Mile Woods.

As described in June 2019, there are extensive wetlands located to the west of the roadway. The Androscoggin River is located to the east, with the top of bank just off the edge of pavement throughout

much of project. Two streams outlet into the river within the project limits, one Tier 1, one Tier 2. The river is a FEMA-mapped regulatory floodway and there is also 100-year floodplain (Zone AE) associated with the river and tributaries. The river is subject to protection under the Shoreland Water Quality Protection Act. A vernal pool survey was completed in May 2020 and six vernal pools were confirmed using dip net surveys. All of these are located within Wetland M, a large forested wetland located at the north end of the project.

Species of concern include the state-listed (Threatened) common mare’s-tail, which is known to occur on the other side of the river. A survey for this species will be completed this summer within potentially suitable habitat. NH Fish & Game expect wild brook trout and slimy sculpin to occur in the tributaries. The project is within the range of the federally listed northern long-eared bat and Canada lynx. Since the preferred alternative will involve tree clearing more than 300 feet from the existing roadway, consultation on northern long-eared bat will not qualify under the FHWA Programmatic Consultation and will instead be carried out under the 4(d) Rule. Regarding Canada lynx, the Department recently sent a letter to the USFWS asking for concurrence on a finding of Not Likely to Adversely Affect.

The 13 Mile Woods Community Forest is located along the entire project area. This is a 7,100-acre multi-use forest, protected by LCHIP and Forest Legacy easements, and the portion along the project area is owned and managed by the Town of Errol. The Department’s formal proposal to move forward with the preferred alternative will be considered at the June LCHIP Board meeting, at which the Board will decide if a joint public hearing will be held with the Department in August. After the hearing, the LCHIP Board will reconvene to vote on whether the project and proposed impacts are within their legislative authority to approve. If it is determined that it is not within the Board’s authority, the project will require approval from the NH General Court through legislation.

A brief overview of the design alternatives was provided. The four alternatives were reviewed in more detail at the June 2019 meeting. There have been no changes except for some refinement of impact calculations. The alternatives consist of the online alignment, shift alignment (shifting the roadway to the west by approximately one lane width), offline alignment (shifting the roadway to the west by approximately a full roadway width), and the offline variation. The offline variation is the same as the offline alignment except at the north end of the project where it shifts further from the existing alignment in order to follow an area at higher elevation, thereby reducing impacts to wetlands and floodplain. The offline variation is the Department’s preferred alternative.

A preliminary summary of impacts was provided.

| | Offline Variation | Offline | Lane Shift | Online |
|---------------------------------|--------------------------|-----------------|-------------------------------|---------------------------------|
| River | No impact | 241 LF Bank | 971 LF Bank 899 LF Channel | 6190 LF Bank 4667 LF Channel |
| Wetlands and Tributaries | 5.1 ac (634 LF) | 5.8 ac (643 LF) | 2.6 ac | 1.8 ac |
| Floodplain | 1920 CY | 4450 CY | 2560 CY | 2970 CY |
| Floodway | No impact | No impact | Impact | Impact |

| | | | | |
|----------------------|------------|--------|------|------|
| 13 Mile Woods | 11 - 12 ac | 9.7 ac | None | None |
|----------------------|------------|--------|------|------|

Direct impacts to vernal pools have not yet been calculated but would be similar for the offline and offline variation alternatives. However, the offline variation would result in greater impact to migratory habitat to the west of the vernal pools and would require amphibians to cross the roadway to reach the vernal pools.

A summary of regulatory considerations was provided. Key discussion points are as follows:

- As a FHWA funded project, a NEPA review must be completed, which requires that the project meet the stated purpose and need while balancing compliance with environmental regulations. The only alternatives that fully meet the project’s purpose and need are the two offline alternatives.
- An Individual Permit will be required for two, possibly three alternatives due to impacts being over 3 acres. If an Individual Permit is required, then the project would need to meet Water Quality Certificate (WQC) requirements for stormwater treatment, which will not be possible for the lane shift and online alternatives.
- All four alternatives will result in impacts to the floodplain. Providing compensatory flood storage for impacts to the floodplain may not be possible for the offline alternative but would be possible for the offline variation.
- As stated earlier, traffic needs to be maintained during construction. It is unlikely that the roadway can be reconstructed online while maintaining traffic, and there are also concerns with traffic maintenance for the lane shift alternative. Only the two offline alternatives provide adequate space to maintain traffic for a long period of time with minimal disruptions.
- Project costs do not vary substantially between alternatives.

Based on preliminary impacts of the preferred alternative, the in-lieu fee for wetland and stream impacts would be approximately \$895,000. Input on potential mitigation projects was requested from town officials in Dummer and Errol, The Nature Conservancy, NH Fish & Game, and the NH Division of Forest & Lands. Subsequent to the meeting, it was confirmed that input was also requested from the North Country Council. To date, NH Fish & Game has provided a summary of land preservation opportunities in Berlin, Milan, Shelburne, and Stark, and The Nature Conservancy has a potential conservation easement opportunity for a large property in northern NH. If land preservation is part of the mitigation package, the hope is that it could serve as mitigation for both wetland impacts and impacts to 13 Mile Woods. No potential stream crossing projects have been provided. Online databases, including SADES, have been reviewed and there are a number of potential stream crossings in the watershed that could be considered under the Stream Passage Improvement Program. However, more input from the federal agencies was needed regarding the inclusion of stream passage improvements in the mitigation package.

Anticipated schedule milestones for the project are as follows:

- LCHIP Board Meeting: June 2020
- Public Hearing: August 2020
- Complete NEPA: August 2020
- Final Design/Permitting: 2021
- Advertising Date: February 2022

The project will continue to be discussed as appropriate mitigation is determined and permitting begins. A summary of comments and questions from attendees follows:

Lori Sommer (NHDES)

NHDES may need to be part of the public hearing. Karl Benedict concurred that there should be additional coordination to determine this.

The Army Corps vernal pool assessment forms should be completed in order to classify the pools as low, medium, or high value. This will help inform mitigation requirements. Please send the assessment to NHDES, the Corps, and EPA.

What is the proposed stormwater treatment? Jennifer Reczek responded that a vegetated buffer instead of detention is the preferred treatment option at this time.

Additional contacts for input on mitigation are the Conservation Fund and Mahoosic Land Trust. Lori will send contact information to Christine.

Is LCHIP working with the Department of Justice on 13 Mile Woods issues? Paula Bellemore responded that LCHIP has been getting guidance from the DOJ and a representative would be attending the June board meeting.

Dijit Taylor (LCHIP)

A subgroup of Board members will be focusing on reviewing this project and may have questions.

The view of the river is likely part of the conservation purpose of the 13 Mile Woods easement.

Recommend contacting the Conservation Fund and Trust for Public Lands for input on mitigation.

Sarah Large (NHDOT)

It is important to recognize that it is challenging to balance the many resources in the project area.

Separate meetings would be helpful to discuss specific resource concerns such as vernal pools and mitigation.

Karl Benedict (NHDES)

Results of the public hearing should be included in the permit application.

As previously discussed, the two stream crossings are located in floodplain, making them Tier 3 crossings. As part of the justification to request that these crossings be downgraded to Tier 1 and Tier 2, the Department should consider floodplain culverts in the vicinity of the vernal pools. These could potentially also serve as amphibian crossings.

Please provide results of the vernal pool survey and assessment.

Amy Lamb (NHB)

Database records of common mare's tail show that it has been identified primarily in August and September, with one record from mid-July. A survey in early to mid-July would be preferable. The known population across the river could be reviewed first.

Rick Kristoff (ACOE)

A meeting with Taylor Bell will be necessary to discuss the inclusion of stream improvements in the mitigation package. Christine noted that she would coordinate a separate meeting to continue discussing mitigation requirements.

Preservation criteria will need to be followed for any proposed land preservation.

Beth Alafat (EPA)

Is the primary purpose of the project to address safety concerns? Can more information be provided regarding traffic? Jennifer Reczek replied that there are incidents on Route 16 in the vicinity the project of vehicles leaving the roadway. The online and partial shift alternatives would require extensive guardrail to meet safety standards. The preferred alternative would require minimal guardrail. Roadway geometry does not present any safety concerns that need to be addressed – curves are currently designed for the posted speed limit.

Did floodplain impacts consider the loss of flood storage in wetlands that would be impacted? Christine responded that the quantified floodplain impacts represented only the physical loss of flood storage within the FEMA mapped floodplain.

Jamie Sikora (FHWA)

If the current roadbed is removed and vegetated, that would provide benefits to water quality. The project will likely be classified as a Categorical Exclusion.

Pete Steckler (TNC)

Could more information on what is proposed for the abandoned roadway be provided? Christine responded that the pavement would be removed from the roadbed and the area would be revegetated. Details on that revegetation still need to be worked out and will need to consider water quality, viewshed, and aesthetics.

Moving the roadway further from the river and revegetating the old roadbed will restore/improve ecosystem services. This could be considered when discussing mitigation.

Minimizing guardrails benefits wildlife connectivity. Wildlife passage under the road can be addressed to some extent by upsizing cross pipes as much as possible. This would also benefit Canada lynx.

Discussions between TNC and the owner of a large property about the conservation easement have not been successful to date, but it would be good to keep this opportunity in mind when considering mitigation

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